

STATE OF CALIFORNIA
CAPITAL OUTLAY
BUDGET CHANGE PROPOSAL (COBCP)
COVER PAGE (REV 06/15)

DEPARTMENT OF FINANCE
915 L Street
Sacramento, CA 95814
IMS Mail Code: A15

BUDGET YEAR 2016-17

BUSINESS UNIT: 7760 COBCP NO. 2 PRIORITY: 2 PROJECT ID: 0000957
(15 digits; for new projects, leave blank)

DEPARTMENT: Department of General Services

PROJECT TITLE: Central Plant: Capitol Irrigation Project

TOTAL REQUEST (DOLLARS IN THOUSANDS): \$ 1,692 MAJOR/MINOR: MA

PHASE(S) TO BE FUNDED: PWC PROJ CAT: CRI CCCI/EPI: 6113

SUMMARY OF PROPOSAL:

This proposal requests \$1.692 million lease revenue bond funds to provide a reclaimed water system to reuse cooling tower blow down water from the State's Downtown Sacramento Central Plant for irrigation water at the State's Capitol Park. The Project includes piping, piping modifications, 100,000 gallon underground water storage tank(s), pumping, chemical treatment and controls at the Central Plant, piping to the Capitol Park, and signage, piping, piping modifications and appurtenances required to tie into the Park's existing irrigation systems.

HAS A BUDGET PACKAGE BEEN COMPLETED FOR THIS PROJECT? (E/U/N/?): N

REQUIRES LEGISLATION (Y/N): N IF YES, LIST CODE SECTIONS: _____

REQUIRES PROVISIONAL LANGUAGE (Y/N) N

IMPACT ON SUPPORT BUDGET: ONE-TIME COSTS (Y/N): N FUTURE COSTS (Y/N): N

FUTURE SAVINGS (Y/N): Y REVENUE (Y/N): N

DOES THE PROPOSAL AFFECT ANOTHER DEPARTMENT (Y/N): N IF YES, ATTACH
COMMENTS OF AFFECTED DEPARTMENT SIGNED BY ITS DIRECTOR OR DESIGNEE.

SIGNATURE APPROVALS:

PREPARED BY

DATE

REVIEWED BY

DATE

DEPARTMENT DIRECTOR

DATE

AGENCY SECRETARY

DATE

DOF ANALYST USE

DOF ISSUE # _____ PROGRAM CAT: _____ PROJECT CAT: _____ BUDG PACK STATUS: _____

ADDED REVIEW: SUPPORT: _____ OCIO: _____ FSCU/ITCU: _____ OSAE: _____ CALSTARS: _____

Original Signed By:

PPBA: Andrea Scharffer

Date: 1-7-15

Using the attached page, follow the format outlined below and fully address all of the items. Use additional pages as needed. Certain projects may require additional information. Questions should be referred to DOF.

A) PURPOSE OF THE PROJECT: (problem, program need, infrastructure deficiency)

California is experiencing an ongoing severe drought. The Governor's Executive Order B-29-15, directive 17, encourages the implementation of innovative water management technologies such as "integrated on-site reuse systems." The Central Plant Project includes an innovative reclaimed water system which reuses cooling tower blow down water to supply the Project site with water for irrigation, toilets, urinals and a fountain. However, the supply of blow down water greatly exceeds the site's water demands, and the excess blow down water is discharged to the County's sewer system. The State's Capitol Park demands a significant amount of water for irrigation and is currently being under-watered due to the drought. The Central Plant could supply over 5.6 million gallons of reclaimed water per year to Capitol Park's irrigation system. This will save purchasing potable water from the City of Sacramento and treating sewer water by Sacramento County.

However, there is currently no infrastructure installed to allow the Central Plant's cooling tower blow down water to be reused for irrigation water at the Capitol Park.

This project would provide a reclaimed water system to reuse cooling tower blow down water from the State's Downtown Sacramento Central Plant for irrigation water at the State's Capitol Park. The Project includes piping, piping modifications, 100,000 gallon underground water storage tank(s), pumping, chemical treatment and controls at the Central Plant, piping to the Capitol Park, and signage, piping, piping modifications and appurtenances required to tie into the Park's existing irrigation systems.

B) RELATIONSHIP TO THE STRATEGIC PLAN: (relevance of problem/need to mission and goals)

This Project relates to DGS' goals for sustainable Green Buildings to achieve the Governor's targets for reducing water use, and implementing water efficiency and conservation measures in state facilities in response to the current drought emergency.

C) ALTERNATIVES: (for each, describe the proposed alternative and provide a brief summary of scope, cost, funding source, program benefits, facility management benefits, and impact on support budget)

Alternative 1- Reclaimed Water System:

Alternative Description: Provide a reclaimed water system to reuse cooling tower blow down water from the State's Downtown Sacramento Central Plant for irrigation water at the State's Capitol Park.

Scope Summary: The Project includes piping, piping modifications, 100,000 gallon underground water storage tank(s), pumping, chemical treatment and controls at the Central Plant, piping to the Capitol Park, and signage, piping, piping modifications and appurtenances required to tie into the Park's existing irrigation systems.

Cost: \$1,692,000

Funding Source: existing bond funds

Program Benefits:

- The Project is a drought mitigation project which responds to the Governor's Executive Order B-29-15, directive 17, which encourages the implementation of innovative water management technologies such as "integrated on-site reuse systems." The system could serve as an example for future developments.
- The Project would provide over 5.6 million gallons of reclaimed water per year to the Capitol Park's irrigation system. This would avoid purchasing over 5.6 million gallons of potable water from the City of Sacramento and treating over 5.6 million gallons of sewer water by Sacramento County.
- As the downtown campus adds additional space and/or heat loads in the future, the amount of reclaimed water would be greater than estimated.
- As the cost of water increases in the future the cost savings would be greater than estimated.
- Annual cost and water savings

Support Budget Impact:

- At the Capitol Park, an estimated savings of \$7,250 per year.
- At the Central Plant, an estimated cost of \$1,500 per year.
- Net savings of \$5,750 per year based upon current usage and rates

Alternative 2 – Use excess lease revenue proceeds to fund another project:

Alternative Description: Make No Changes

Scope Summary: Make No Changes

Cost: \$0

Funding Source: Excess bond proceeds

Program Benefits: The excess bond proceeds that would be used to fund this project could be used to pay down lease revenue debt service or fund another capital outlay project.

Facility Management Benefits: None

Support Budget Impact: \$0

D) RECOMMENDED SOLUTION:

1) Which alternative and why?

Alternative #1 – Reclaimed Water System

2) Detail scope description.

At the Central Plant:

- Install underground water storage tank(s) with a total capacity of 100,000 gallons.
- Install a chemical feed system to adjust the water pH and to control biological growth in the water storage tank.
- Install transfer pumps, power, controls, and a new 4" purple PVC pipeline connecting the Central Plant with the Capitol Park. The pipe will be installed in the existing utilidor between the Central Plant and the State Capitol Building

At the Capitol Park:

- Install a new direct buried 4" purple PVC pipeline in the Capitol Park area.

- Install 3-way mixing valves at the two irrigation meters to allow blending of City water with the blowdown water to control TDS. Install Backflow preventers to ensure that reclaimed water does not go into the drinking water piping or into the City water supply.
- Install signage to indicate the irrigation system utilizes reclaimed water.

3) Basis for cost information.

2015 Study by Stantec Engineering and DGS' 3-Page Estimate.

4) Complete description of impact on support budget.

- At the Capitol Park, an estimated savings of \$7,250 per year.
- At the Central Plant, an estimated cost of \$1,500 per year.
- Net savings of \$5,750 per year based upon current usage and water rates

5) Identify and explain any project risks.

The water storage tank will have to be monitored and the chemical water treatment system will have to be operated properly to maintain water quality in the reclaimed water system which is suitable for irrigation.

6) List requested interdepartmental coordination and/or special project approval (including mandatory reviews and approvals, e.g. technology proposals).

Work on the project will have to be coordinated with the State Capitol and the Central Plant to minimize the impact of operations.

E) E. Consistency with Government Code section 65041.1:

1) Does the recommended solution (project) promote infill development by rehabilitating existing infrastructure and how? Explain.

No

2) Does the project improve the protection of environmental and agricultural resources by protecting and preserving the state's most valuable natural resources? Explain.

Yes, this Project reuses water, which is one of the State's most valuable natural resources.

3) Does the project encourage efficient development patterns by ensuring that infrastructure associated with development, other than infill, support efficient use of land and is appropriately planned for growth? Explain.

No